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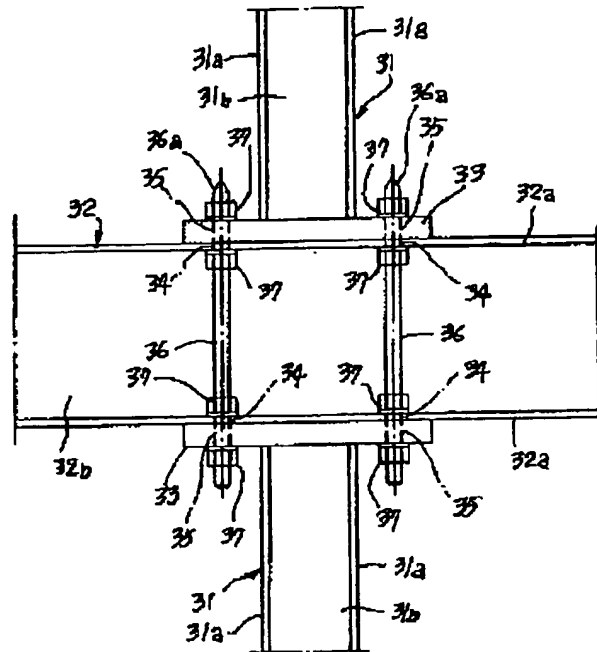
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TITLE : COLUMN-BEAM JOINING STRUCTURE



**ABSTRACT :** PROBLEM TO BE SOLVED: To inexpensively improve workability by joining column materials to a beam material of shape steel, attaching plates of upper and lower column materials to upper and lower flanges of the beam material by welding end plates to respective end parts of the upper and lower column materials, and fastening respective through holes by bolts.

**SOLUTION:** In a column-beam joining structure, when column materials 31 are joined above and below a beam material 32, end plates 33 welded to respective end parts of the upper and lower column materials 31 are attached to upper and lower flanges 32a of the beam material 32. In that case, through bolts 36 are fitted to and inserted into respective through holes 34 and 35 of the flanges and the end plates, and the respective end plates 33 are fastened to the respective flanges 32a. Therefore, force is transmitted to the column materials 31 from the beam material 32 through the end plates 33 and the through bolts 36, and strength is secured to bending stress and shearing force of a column material end part. Therefore, machining work of the through holes 34 and 35 to the column materials 31 and the beam material 32 is simplified. Therefore, the column material 31 and the beam material 32 are inexpensively joined together, and fastening work of the end plates 33 is performed in an outside wide space, and workability can be improved.

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